

## ABSTRACT OF THE DISCLOSURE

A wide-band antenna assembly is mounted on a circuit board including a contact and a radio frequency module electrically connected to the contact. The assembly comprises a plane antenna formed of a thin film based magnetic material, and a cover formed of metal material having shielding capability. The cover is releasably secured to the circuit board and includes a rectangular recess with the plane antenna glued or adhered therein by insulating adhesive and a slit on the recess for permitting a bent end of the plane antenna to pass through to be electrically connected to the contact. The antenna is further bridged to the metal cover by a conducting wire so as to utilize the gain effect of the metal cover itself. The assembly can substantially eliminate adverse effect and electric noises caused by electrical/electronic components of the circuit board, resulting in a great improvement of communication quality.